## CLAIMS

## What is claimed is:

4	1	A method co	mnrisina.

- 2 compiling data on reported factors that cause data transmission errors;
- 3 predicting unreported factors that can cause data transmission errors;
- 4 compiling data on the unreported factors;
- 5 employing error correction on data to be transmitted, based on at least
- one of the data on the reported factors and the unreported factors; and
- 7 transmitting the data to be transmitted to at least one receiver.
  - 2. The method as in claim 1, wherein the compiling data on the reported
- 2 factors and on the unreported factors comprises collecting data that can effect
- data transmission on a path to the at least one receiver, and collecting data on
- 4 at least one of regional data, environmental data, atmospheric data, sunspot
- 5 activity and season, radio frequency propagation data, and retransmission
- 6 factors.

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- 1 3. The method as in claim 1, wherein the compiling data on reported
- 2 factors comprises at least one of continuously collecting data and collecting
- 3 data at predetermined events that can effect data transmission.
- 1 4. The method as in claim 1, wherein the predicting unreported factors
- 2 comprises at least one of continuously predicting and predicting at
- 3 predetermined events that can effect data transmission.
- 1 5. The method as in claim 1, wherein the employing error correction
- 2 comprises employing at least one of forward error correction and carouselling,
- and adjusting at least one of bandwidth and Quality Of Service (QOS).
- 1 6. The method as in claim 1, wherein the employing error correction
- 2 comprises dynamically adjusting error correction.
- 1 7. The method as in claim 1, wherein the transmitting comprises
- 2 broadcasting data.

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- The method of claim 1, wherein the transmitting the data comprises
- utilizing at least one of wireless conventional ground terrestrial transmission. 2
- digital television (DTV) connection, analog and digital cable television (CATV). 3
- satellite connection, direct broadcast satellite system (DBS), wide area network 4
- (WAN) connection, and formats chosen by the Advanced Television Systems
- Committee (ATSC) and the National Television Standards Committee (NTSC).
  - 9. An apparatus comprising:

an error correction engine to compile data on reported factors that cause data transmission errors, predict and compile unreported factors that can cause data transmission errors, and employ error correction on data to be transmitted, based on at least one of the data on the reported factors and the unreported factors: and

a transmitter, coupled to the error correction engine, to transmit the data to be transmitted to at least one receiver.

- The apparatus as in claim 9, wherein the error correction engine collects 10 data that can effect data transmission on a path to the at least one receiver,
- and collects data on at least one of regional data, environmental data, 3
- 4 atmospheric data, sunspot activity and season, radio frequency propagation 5
  - data, and retransmission factors.
- 1 11. The apparatus as in claim 9, wherein the error correction engine at least
- one of continuously collects data on reported factors and collects data on 2
- reported factors at predetermined events that can effect data transmission. 3
- 1 12. The apparatus as in claim 9, wherein the error correction engine at least
- one of continuously predicts unreported factors and predicts unreported factors 2
- at predetermined events that can effect data transmission. 3
- The apparatus as in claim 9, wherein the transmitter broadcasts data. 1 13.
- The apparatus as in claim 9, wherein the error correction engine 14. 1
- dynamically employs at least one of forward error correction and carouselling. 2
- 3 and adjusts at least one of bandwidth and Quality Of Service (QOS).

- 15. The apparatus of claim 9, wherein the transmitter utilizes at least one of wireless conventional ground terrestrial transmission, digital television (DTV) connection, analog and digital cable television (CATV), satellite connection, direct broadcast satellite system (DBS), wide area network (WAN) connection, and formats chosen by the Advanced Television Systems Committee (ATSC) and the National Television Standards Committee (NTSC).
- 16. A machine readable medium having instructions that when executed by a processor cause the processor to perform operations comprising:
  - compiling data on reported factors that cause data transmission errors; predicting unreported factors that can cause data transmission errors; compiling data on the unreported factors;
- employing error correction on data to be transmitted, based on at least one of the data on the reported factors and the unreported factors; and transmitting the data to be transmitted to at least one receiver.
- 17. The machine readable medium of claim 16, wherein the compiling data on the reported factors and on the unreported factors comprises collecting data that can effect data transmission on a path to the at least one receiver, and collecting data on at least one of regional data, environmental data, atmospheric data, sunspot activity and season, radio frequency propagation data, and retransmission factors.
- 18. The machine readable medium of claim 16, wherein the compiling data on reported factors comprises at least one of continuously collecting data and collecting data at predetermined events that can effect data transmission.
- 1 19. The machine readable medium of claim 16, wherein the predicting unreported factors comprises at least one of continuously predicting and predicting at predetermined events that can effect data transmission.
- 1 20. The machine readable medium of claim 16, wherein the employing error correction comprises employing at least one of forward error correction and

- 3 carouselling, and adjusting at least one of bandwidth and Quality Of Service
- 4 (QOS).
- 1 21. The machine readable medium of claim 16, wherein the employing error
- 2 correction comprises dynamically adjusting error correction.
- 22. The machine readable medium of claim 16, wherein the transmitting
- 2 comprises broadcasting data.
- 1 23. The machine readable medium of claim 16, wherein the transmitting the
- data comprises utilizing at least one of wireless conventional ground terrestrial
- 3 transmission, digital television (DTV) connection, analog and digital cable
- 4 television (CATV), satellite connection, direct broadcast satellite system (DBS),
- 5 wide area network (WAN) connection, and formats chosen by the Advanced
- 6 Television Systems Committee (ATSC) and the National Television Standards
- 7 Committee (NTSC).